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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,495	09/08/2003	Yu-Chin Lai	P03364	9341

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EXAMINER

PEZZUTO, HELEN LEE

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,495

Applicant(s)

LAI, YU-CHIN

Examiner

Helen L. Pezzuto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005 and 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-9 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/8/03, 3/15/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II, claims 4-9 in the reply filed on 5/9/05 and 7/8/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Response to Amendment

Applicant's cancellation of non-elected claims 1-3, 10-24, and the amendment to claims 4-5, and 9 filed in the response on 7/8/05 is acknowledged. Currently, claims 4-9 are pending in this application.

Claim Objections

2. Claims 7-8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Currently, claims 7-8 are dependent on cancelled claim 1.

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Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding the definition of R1-R3, what is the scope and meaning of the expression "is nothing"? Do applicants intend a single bond?

Regarding the definition of R5, do applicants intend C1-10 alkyl? Please clarify.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Jinkerson (US-932 or US-707).

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US 5,470,932 and US 5,662,707 both to Jinkerson disclose polymerizable yellow dyes and their utility in the manufacturing of ophthalmic lenses. Specifically, prior art describe the synthesis of polymerizable azo yellow dyes within the scope of the instant azo compound, defined by Formula 1 and 2 in the references (US-932, col. 5, lines 31-50; col. 6, lines 46-66). The preferred embodiments include (meth)acrylates and di(meth)acrylates are further defined by compounds 1 and 2 (col. 5, lines 50-62; col. 6, line 67 to col. 7, line 12). Patentee teaches the manufacturing of ophthalmic lens via copolymerization of one or more polymerizable azo yellow dyes of Formula 1 or 2 with suitable lens-forming monomers by free radical mechanism (col. 3, line 65 to col. 4, line 25; col. 7, line 51 to col. 8, line 26; col. 9, lines 25-45). Suitable lens-forming monomers include applicants' "acrylic-type monomers" claimed and specified in the disclosure. The preparation of lens material derived from free radical copolymerization of the azo yellow dyes with PEA and PEMA was exemplified in working Examples 3-5. Thus, anticipating the instant claims.

7. Claims 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sabi et al. (Japanese Journal of Applied Physics,

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Part I: (2001), 40(3B), 1613-1618) or Adameck et al. (Applied Physics Letters (1998), 73(20), 2884-2886) or Hill et al. (J. Applied Physics (1991), 70(8), 4649-51).

The article to Sabi et al. discloses the utility of azobenzene-containing polymers for rewritable optical disc systems. Prior art azobenzene-containing polymers is structurally represented in Figure 1 (a), wherein the azobenzene side chains are attached via $(CH_2)_2$ spacers to a polymethacrylate backbone. Thus, anticipating the subject matter expressed in claims 4-5.

Adameck et al. disclose using scanning second harmonic microscopy techniques in analysis of polymer films. An azophenyl ester side chain copolymer of P(MMA/DRMA) (poly(methyl methacrylate-co-Disperse Red 1 methacrylate) was employed as a test material. Thus, anticipating the instant claims.

The article to Hill et al. is related to the production of polymeric electro-optic phase modulators by spin coating an azobenzene side chain polymer expressed in Figure 3 onto etched indium phosphide. Thus, anticipating the instant polymeric composition and its method of making.

8. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Chemical Abstract XP-002314394.

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Kostyukov et al. in a Russian article describe the synthesis of ally derivatives of azo dyes and their subsequent copolymerization with vinyl monomers. Prior art teaches the copolymerization of allyl azo dye II with methyl methacrylate, presumably via free radical mechanism. Thus, anticipating the present claims.

9. Claims 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Chemical Abstract XP-001081820.

The abstract summarized the article by Muller et al., describing the addition of 4-(N-ally-N-methylamino)azobenzene to a H-functionalized siloxane by Pt catalysis. Thus, anticipating the present claims. It is noted that claims 7-9 are currently dependent on claim 1. Hence, the subject matter of claim 1 are incorporated into claims 7-9 in this rejection.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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11. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichinohe (US-792 or EP-541). The reference to the discussion will be directed to US-792.

US 6,878,792 B2 and EP 1 293 541 A2 to Ichinohe disclose a polymerizable azo yellow dye structurally defined in formulas [I] or [II] (col. 3, lines 14 to col. 4, line 19), with suitable embodiments expressed at col. 5, line 11 to col. 6, line 33. The addition of said yellow dye to a silicone material having hydrosilyl groups is expressly taught and exemplified (col. 4, lines 20-54; col. 6, lines 34-49; cols. 9-10, Examples 1 and 3). Patentee further teaches the radical polymerizability of these azo yellow dyes, and their capability forming copolymer products with acrylic comonomers via radical mechanism (abstract; col. 4, lines 35-38; col. 6, lines 38-39). Production of acrylic resins with azo dye compound 2 was exemplified (col. 10, Example 2). In light of the clear suggestion of chemical bonding of azo yellow dyes to silicone material, and their capability of forming acrylic type copolymer products via free radical mechanism, provided within the context of intraocular lens manufacturing. It would have been obvious and fully within the purview of one skilled in the art to formulate such

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polymeric composition within the scope of applicant's claims as taught, motivated by the reasonable expectation of success in the production of intraocular lens products, as in applicant's endeavor. Thus, rendering obvious the present claims.

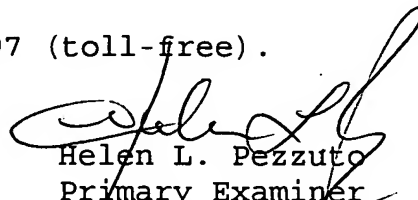
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp